

# How can I get an arbitrary font size in LaTeX?

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The standard fonts that LaTeX uses are bitmaps. These bitmapped fonts can, theoretically, be generated at any point size; however, this requires that you know how to run the font-generating program (metafont) and have enough space to store the bitmapped fonts that are generated. Generally, though, you'll just use the sizes that have already been created, and these are only in the standard (`\large`, `\Huge`, etc) sizes.

However, if you use a postscript font, you can use whatever size you want, since these are not stored as bitmaps anywhere, but instead generated at the right size internally on the printer. So, if you're using a postscript font (say, by specifying "timrom" or "newcen" in the `documentstyle`), you can use arbitrary sizes of these fonts, by just saying:

```
\newfont{\wayhuge}{t-rom scaled 10000}
```

Then, if you used

```
{\wayhuge Big}
```

you would get "Big" in 100pt Times Roman when you printed it.

You should also specify the following environment variables in order to get the file to latex cleanly when using many of the postscript fonts. Just type (or include these lines in your `.environment` file):

```
attach texfonts
attach sipb

setenv TEXFONTS
.: /usr/athena/lib/tex/fonts:/mit/sipb/share/tex/fonts/tfm:/mit/sipb/share/tex/fonts/vf:/mit/texfonts:/mit
TEXPKS $TEXFONTS
extend TEXPKS /mit/sipb/share/tex/fonts/pk:
setenv PKFONTS $TEXPKS
```

The names of some of the postscript fonts we have are listed below.

Postscript Font Name	Name to use in <code>\newfont</code> command (dvips syntax)
AvanteGarde-Book	rpagk
AvanteGarde-BookOblique	rpagko
AvanteGarde-Demi	rpagd
AvanteGarde-DemiOblique	rpagdo
Bookman-Demi	rpbkd
Bookman-Light	rpbkl
Courier	rpcrr
Courier-Bold	rpcrb
Courier-Oblique	rpcrro
Courier-BoldOblique	rpcrbo
Helvetica	rphvr
Helvetica-Bold	rphvb
Helvetic-Oblique	rphvro

Helvetica-BoldOblique	rphvbo
NewCenturySchlbk-Roman	rpncr
NewCenturySchlbk-Italic	rpncri
NewCenturySchlbk-Bold	rpncb
NewCenturySchlbk-BoldItalic	rpncbi
Palatino	rpplr
Palatino-Bold	rpplb
Palatino-Italic	rpplri
Palatino-Oblique	rpplro
Times-Roman	rptmr
Times-Bold	rptmb
Times-Italic	rptmri
Times-BoldItalic	rptmbi
Zapf Chancery Medium Italic	rpzcmi



xdvi is unable to display PostScript fonts, and will substitute the default Computer-Modern in their place.